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ABSTRACT

This document is a summary of a doctoral thesis which was written to answer three questions. These are: (1) How important are personal characteristics of black workers in explaining the variance in their relative occupational standing among the private sectors of these cities? (2) How important are general characteristics of the cities and industries in which they work? and (3) What policies are most likely to improve the relative occupational standing of blacks employed in the private sector? The strategy for answering these questions was to develop measures of personal characteristics of black workers and of general characteristics of the labor markets and industries where they work. Answers derived through the use of this strategy include the following: (1) Personal characteristics of blacks such as their education and age are important, but less so, than general characteristics of the cities in which they work, in predicting their relative occupational standing; (2) Black women have greater chances of achieving occupational parity in cities where in-migration is not great; (3) Occupational parity for black men depends on greater access to manufacturing and unionized industries, where the demand for white collar workers is weak. (Author/JS)

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# DIFFERENCES IN THE OCCUPATIONAL STANDING OF BLACK WORKERS AMONG INDUSTRIES AND CITIES

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AN EQUAL EMPLOYMENT OPPORTUNITY REPORT

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# DIFFERENCES IN THE OCCUPATIONAL STANDING OF BLACK WORKERS AMONG INDUSTRIES AND CITIES

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# PREFACE

This report summarizes a study accepted as a doctoral dissertation by the Economics Faculty of the University of Maryland. For readers interested in the technical details of the study, a copy of the dissertation is in the Commission's library. The study expresses the findings and conclusions of the author and does not necessarily reflect the views of the Equal Employment Opportunity Commission.



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# AN OVERVIEW

Equal employment opportunity means equal opportunity to attain occupational as well as income parity for racial, ethnic and religious minorities and for women. This study deals with the quest for occupational parity by black men and women employed in the private sector of forty-six of the nation's largest labor markets.

Occupational parity exists when black workers are distributed among occupations very much like the distribution of the majority[1] of workers. With occupational equality, the average earnings capacity of black employees would be equal to that of workers in the majority group, because their occupational distributions would be identical. Income equality for black workers requires that their actual average earnings be equivalent to the actual average earnings of the majority of workers within each occupation.

An easy way to measure the difference between the ideal of occupational parity and the reality of black employment patterns is to compare indexes of the average occupational standing of black workers to identically constructed indexes for the majority of workers. By weighting both black and majority occupational distributions with the wage and salary income earned by the average worker within each occupation, one derives a weighted average of each distribution.[2] These weighted averages are summaries of the employment pattern of each group of workers. Differences in these averages for blacks as opposed to the majority of workers reflect solely the actual differences in their occupational distributions, since the same set of income weights are applied to both distributions.

A convenient way to express the difference between averages for blacks and for the majority of workers is in the form of a ratio. The ideal of occupational parity implies that the black average equals the majority average, making the black-to-majority ratio equal 100%. The reality of black occupational standing relative to the occupational standing of the majority of privately employed persons falls far short of this ideal. The relative occupational standing of black men ranges from only 69% to as high as 92% among forty-six major cities. The occupational standing of black women, relative to that of the majority of women, ranges from only 33% to 76%. Great variability also exists among industries within these forty-six cities in the relative occupational standing of black men and women.

This study tries to answer three questions: 1) How important are personal characteristics of black workers in explaining the variance in their relative occupational standing among the private sectors of these cities? 2) How important are general characteristics of the cities and industries in which they work? 3) What policies are most likely to improve the relative occupational standing of blacks employed in the private sector?

The strategy for answering these questions was to develop measures of personal characteristics of black workers and of general characteristics of the labor markets and industries where they work. Because these measures take on different values for each of the forty-six cities and for each of the industries common to the cities, they are variables. They are explanatory or independent variables because they are used to predict the value of the dependent variable, which measures the relative occupational standing of black men and women. Through least-squares regression analysis, and under its statistical assumptions, one can control for the influence of these measures as determinants of the relative occupational standing of blacks. Thereby, one estimates both the direction and magnitude of change in black workers' relative occupational standing associated with changes in those independent variables which are statistically significant.

Answers to the questions above, developed through the use of this strategy, include the following:

- Personal characteristics of blacks such as their education and age are important, but less so, than general characteristics of the cities in which they work, in predicting their relative occupational standing. Blacks improve their chances of realizing occupational parity by improving their education; but education alone is insufficient.
- Maintaining a low unemployment rate offers occupational advantage to black women, but breaking up the ghetto through housing desegregation offers more.
- Black women have greater chances of achieving occupational parity in cities where in-migration is not great.
- Occupational parity for black men depends on greater access to manufacturing and unionized industries where the demand for white collar workers is weak.
- The relative occupational standing of black men is below average, *even after* accounting for such factors as skill and educational requirements, firm size, unionization, employment growth and wage levels, in nine industries. In all of these "high discriminating" industries, large proportions of industry employees work for companies with federal government contracts. Thus, great potential leverage exists for improving black opportunity for occupational parity in these industries:

  petroleum and natural gas
  building construction
  other construction
  tobacco manufactures
  railroad transport
  holding companies
  miscellaneous business services
  miscellaneous repair services
  private educational services



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## THE RELATIVE OCCUPATIONAL STANDING OF BLACK MEN AND WOMEN IN THE PRIVATE SECTORS OF FORTY-SIX CITIES

Among the forty-six cities listed in Table 1, black men had lowest average occupational standing, relative to the majority of men, in Dallas and Houston. Even if black men had earned exactly what men of the majority group earned in each occupation, their earnings would have been only 69% and 70% of the average earnings of majority men in Dallas and Houston respectively.[3] Black men in Canton were closer to occupational equality with an index equal to 87% of the index for majority men.

The index for blacks, expressed as a percent of the index for the majority group, is in Table 1 for forty-six labor markets. These values are based on data reported to the Commission in 1966 in the Equal Employment Opportunity Survey.[4] Although the survey data for 1969 suggest that higher values now exist in some of these metropolitan areas, the rank order of the cities has remained stable.

The relative occupational standing of privately employed black women also varied greatly among these cities, as Table 1 shows. An accurate estimate of the gap for black women between occupational equality and reality requires an accounting for the large numbers of black women who are domestic workers.[5] The Equal Employment Opportunity Survey does not cover domestic workers in addition to those workers covered by the survey. Unadjusted estimates are biased upward, the degree of bias varying with the proportion of black and majority women employed as domestics. Thus, the adjusted estimates are those referred to throughout this study, because they are more realistic.[6]

Black women in these forty-six cities had lowest relative occupational standing in Houston, Texas and Jackson, Mississippi. Even if black women had earned exactly what the majority of women earned in each occupation with these two cities, average earnings of black women would have been only 33% of the average earnings of majority women. Yet in New Haven their relative occupational standing was much higher, 83%. Boston, Bridgeport, Connecticut and Charleston, West Virginia also had higher values than other cities.

## Table 1: Relative Occupational Standing of Blacks Employed in The Private Sector

| Standard Metropolitan Statistical Area | Men | Women * Adjusted for Private Household Workers | Women** Unadjusted for Private Household Workers |
|---|---|---|---|
| 46 SMSA Average | 77.4 | 58.3 | 85.6 |
| Birmingham, Ala. | 76.0 | 40.2 | 83.5 |
| Little Rock, Ark. | 74.6 | 52.3 | 88.0 |
| Bakersfield, Calif. | 74.5 | 41.6 | 86.4 |
| Los Angeles, Calif. | 77.0 | 67.0 | 88.2 |
| Sacramento, Calif. | 78.6 | 62.2 | 94.3 |
| San Francisco, Calif. | 74.2 | 62.0 | 87.5 |
| Bridgeport, Conn. | 78.3 | 76.6 | 84.8 |
| Hartford, Conn. | 79.9 | 69.2 | 88.3 |
| New Haven, Conn. | 78.6 | 83.0 | 88.2 |
| Wilmington, Del. | 76.8 | 46.9 | 75.3 |
| Washington, D.C. | 71.0 | 53.4 | 83.4 |
| Atlanta, Ga. | 73.3 | 43.1 | 79.9 |
| Honolulu, Hawaii | 81.6 | 46.4 | 90.5 |
| Chicago, Ill. | 78.2 | 68.0 | 77.2 |
| Peoria, Ill. | 78.8 | 58.9 | 78.1 |
| Evansville, Ind. | 79.5 | 62.1 | 91.0 |
| Gary, Indiana | 83.5 | 67.4 | 92.1 |
| Indianapolis, Ind. | 79.3 | 59.1 | 86.9 |
| New Orleans, La. | 71.5 | 43.7 | 81.5 |
| Baltimore, Md. | 76.1 | 44.8 | 81.8 |
| Boston, Mass. | 77.5 | 77.8 | 89.7 |
| Detroit, Mich. | 81.1 | 66.7 | 90.9 |
| Jackson, Miss. | 71.6 | 33.0 | 75.6 |
| St. Louis, Mo. | 77.8 | 59.2 | 84.8 |
| Omaha, Neb. | 77.5 | 68.2 | 81.2 |
| Newark, N.J. | 77.1 | 62.1 | 86.0 |
| Trenton, N.J. | 74.4 | 60.8 | 83.8 |
| Buffalo, N.Y. | 83.2 | 70.1 | 86.4 |
| New York City, N.Y. | 76.6 | 63.2 | 88.8 |
| Syracuse, N.Y. | 81.5 | 62.2 | 77.5 |
| Canton, Ohio | 84.3 | 63.1 | 91.0 |
| Cinncinnati, Ohio | 78.9 | 62.5 | 90.8 |
| Cleveland, Ohio | 80.3 | 59.6 | 85.5 |
| Oklahoma City, Okla. | 74.6 | 66.5 | 87.8 |
| Johnston, Pa. | 86.9 | 74.8 | 91.0 |
| Philadelphia, Pa. | 78.4 | 55.2 | 82.8 |
| Scranton, Pa.*** | 92.3 | 44.0 | 89.4 |
| Charleston, S.C. | 73.7 | 39.5 | 87.7 |
| Greenville, S.C. | 78.2 | 60.5 | 90.8 |
| Memphis, Tenn. | 75.5 | 45.2 | 77.7 |
| Dallas, Tex. | 69.1 | 47.8 | 83.3 |
| El Paso, Tex. | 71.7 | 70.6 | 76.5 |
| Fort Worth, Tex. | 72.5 | 43.3 | 80.3 |
| Houston, Tex. | 70.2 | 33.1 | 79.2 |
| Charleston, W. Va. | 73.6 | 76.8 | 105.1 |
| Milwaukee, Wisc. | 82.3 | 71.3 | 87.9 |

*Source:* Equal Employment opportunity Survey (EEO-1), 1966, Office of Research, U.S. Equal Employment Opportunity Commission, Washington, D.C.

* Adjusted estimates add a tenth occupation, Provate Household Workers.

** Unadjusted estimates include nine occupations only: Officials and Managers, Professionals, Technicians, Sales, Clerical, Crafts, Operatives, Laborers, Service (Except Private Household Workers).

*** Scranton is not discussed in the text although it was one of the cities included in the regression analysis. Only forty-five Negro men were reported as privately employed in the Scranton Standard Metropolitan Statistical Area to the Joint Reporting Committee in 1966. Only Twenty-three Negro women were reported. Thus, too few Negroes were represented in the index computations for Scranton. The values in the table above are of limited meaning for this reason.

## INDUSTRIAL COMPONENTS OF THE FORTY-SIX CITIES

One reason why cities vary so much in terms of the degree of black occupational equality is that the industries within them vary regarding black employment opportunity. Among sixty-seven industries[7] common to all forty-six labor markets, the relative occupational standing of black men ranged from 67% in miscellaneous business services to 90% in inter-urban passenger transportation and bituminous coal mining. Index values for black women ranged from 57% of index values for majority women in railroads to 106% in apparel and accessory stores. Table 2 gives for industries common to all forty-six labor markets the percentage derived by dividing the index for blacks by the index for majority workers of the same sex.[8]

**Table 2: Relative Occupational Standing of Blacks in Industries Within the Forty-Six Cities (Continued)**

| Industry | Men | Women |
|---|---|---|
| 67 Industry Average | 78.1 | 86.4 |
| Metal Mining | 75.3 | 96.4 |
| Bituminous Coal and Lignite Mining | 89.8 | 73.3 |
| Crude Petroleum and Natural Gas | 71.4 | 79.2 |
| Mining and Quarrying of Nonmetallic Minerals, except Fuels | 77.8 | 81.3 |
| Building Construction-General Contractors | 72.2 | 66.5 |
| Construction Other Than Building Construction-General Contractors | 74.6 | 84.1 |
| Construction-Special Trade Contractors | 77.1 | 79.7 |
| Ordnance and Accessories | 78.0 | 87.5 |
| Food and Kindred Products | 80.9 | 77.3 |
| Tobacco Manufactures | 72.9 | 87.7 |
| Textile Mill Products | 81.8 | 86.3 |
| Apparel and Other Finished Products Made From Fabrics | 80.9 | 93.5 |
| Lumber and Wood Products, except Furniture | 79.6 | 67.9 |
| Furniture and Fixtures | 81.9 | 78.2 |
| Paper and Allied Products | 81.8 | 85.0 |
| Printing, Publishing and Allied Industries | 76.0 | 83.2 |
| Chemicals and Allied Products | 76.8 | 82.3 |
| Petroleum Refining and Related Industries | 74.5 | 94.7 |
| Rubber and Miscellaneous Plastics Products | 84.1 | 88.3 |
| Leather and Leather Products | 83.3 | 85.3 |
| Stone, Clay, Glass and Concrete Products | 81.2 | 82.2 |
| Primary Metal Industries | 83.7 | 83.9 |
| Fabricated Metal Products, Except Ordnance, Machinery, and Transportation Equipment | 82.8 | 85.7 |
| Machinery, Except Electrical | 80.9 | 82.4 |
| Electrical Machinery, Equipment and Supplies | 79.3 | 89.6 |
| Transportation Equipment | 82.4 | 85.1 |
| Professional, Scientific and Controlling Instruments; Photographic and Optical Goods | 77.4 | 87.6 |
| Miscellaneous Manufacturing Industries | 80.1 | 82.6 |
| Railroad Transportation | 75.1 | 57.2 |
| Local and Suburban Transit and Interurban Passenger Transportation | 89.8 | 85.6 |

| Industry | Men | Women |
|---|---|---|
| Motor Freight Transportation and Warehousing | 87.4 | 80.8 |
| Water Transportation | 82.0 | 88.7 |
| Transportation by Air | 72.9 | 92.0 |
| Pipe Line Transportation | 87.9 | 99.3 |
| Transportation Services | 84.3 | 88.0 |
| Communication | 76.6 | 96.7 |
| Electric, Gas, and Sanitary Services | 76.8 | 91.7 |
| Wholesale Trade | 77.5 | 84.1 |
| Building Materials, Hardware and Farm Equipment Dealers | 80.8 | 98.1 |
| Retail Trade-General Merchandise | 74.1 | 104.6 |
| Food Stores | 81.5 | 97.7 |
| Automotive Dealers and Gasoline Service Stations | 76.2 | 80.2 |
| Apparel and Accessory Stores | 75.1 | 105.7 |
| Furniture, Home Furnishings, and Equipment Stores | 75.9 | 90.4 |
| Eating and Drinking Places | 78.2 | 91.3 |
| Miscellaneous Retail Stores | 72.2 | 90.5 |
| Banking | 74.1 | 96.6 |
| Credit Agencies Other Than Banks | 70.4 | 96.7 |
| Security and Commodity Brokers, Dealers, etc. | 88.6 | 100.7 |
| Insurance Carriers | 79.9 | 96.1 |
| Insurance Agents, Brokers, and Service | 77.7 | 97.9 |
| Real Estate | 75.8 | 80.0 |
| Combinations of Real Estate, Insurance, Loans, Law Offices | 69.7 | 67.6 |
| Holding and Other Investment Companies | 59.3 | 82.4 |
| Hotels, Rooming Houses, Camps, and Other Lodging Places | 78.3 | 79.4 |
| Personal Services | 82.3 | 90.2 |
| Miscellaneous Business Services, and Garages | 74.5 | 70.7 |
| Miscellaneous Repair Services | 73.9 | 84.8 |
| Motion Pictures | 79.1 | 89.2 |
| Amusement and Recreation Services, except Motion Pictures | 76.6 | 80.3 |
| Medical and Other Health Services | 69.7 | 79.5 |
| Legal Services | 80.8 | 98.5 |
| Educational Services | 67.9 | 79.8 |
| Museums, Art Galleries, Botanical and Zoological Gardens | 86.7 | 96.9 |
| Non-profit Membership Organizations | 76.4 | 84.1 |
| Miscellaneous Services | 80.8 | 93.4 |

*Source:* Equal Employment Opportunity (EEO-1) Survey, 1966, Washington, D.C.: U.S. Equal Employment Opportunity Commission

## THE SHARE OF TOTAL EMPLOYMENT HELD BY BLACKS

Equal employment opportunity can never become a reality in America's major cities and industries unless blacks have access to a fair share of all jobs. By firing blacks in low-paying occupations, employers can show higher relative occupational standing for those blacks who remain on the payroll. Thus, indexes of the average occupational standing of blacks by industry or city are meaningful only when the black share of total employment is taken into account as well. An industry with blacks in less than one percent of all jobs is not necessarily implementing equal employment opportunity even if its few blacks do enjoy occupational parity with the majority of its work force. A city with a population which is one quarter black hardly evidences meaningful affirmative action if only 5% of private employment is black. That 5% may enjoy occupational parity, but they are a select few.

Blacks working in private industry need not expect a trade-off between occupational parity and the size of their share of total employment. No significant correlation exists among these sixty-seven industries between the relative occupational standing of black men or women and their respective shares of private employment. Thus, there is no tendency for industries with relatively few blacks employed to give greater occupational equality to those few. But neither is there a tendency for industries doing a good job in terms of occupational parity to also do a good job in terms of increasing the blacks' share of all jobs.

Thus, a factor which is controlled statistically in answering the basic questions of this study is the size of the blacks' share of total private employment.[9] Among the industries indigenous to the forty-six cities, black men have the largest share, 31% of total male employment in eating and drinking establishments. Their lowest share is in pipeline

transportation firms, less than one percent (.6%) of all jobs held by men. The largest share of female employment for blacks is 55% in personal services. The black woman's share of female employment ranged to low of one-tenth of one percent in miscellaneous services.[10] Table 3 gives these values for men and women in sixty-seven industries insofar as the industries are within the forty-six Standard Metropolitan Statistical Areas.

The concentration of blacks in both the population and in private employment (as reported in the EEO-1 survey) varied among the forty-six cities. In Houston where black men and women had lowest relative occupational standing, blacks represented nearly 19% of the population in 1965. The private firms reporting to the Commission in 1966 gave only 12% of all jobs held by men to blacks. Blacks held only 5% of all (non-domestic) jobs held by women. The relative occupational standing of black men was also very low in Dallas, labor market where blacks were 14% of the 1965 population. Only 10% of all privately employed men were black.

Canton, the city where black men had the highest degree of occupational equality, had a low concentration of blacks in the population, 6%. As Table 4 shows, the black shares of total private employment are within a percentage point of their concentration in the population. Having the highest relative occupational standing for black women, New Haven had 6.6% blacks in the population. Moreover, blacks held over 7% of all jobs held by women in private industry. Table 4 gives the black share of the population and of total male and female employment in the private sector of the forty-six cities.

## Table 3: Black Share of Total Industry Employment Within Forty-Six Cities

| Industry | Black Men, As a Percent of All Men Employed | Black Women As a Percent of All Women Employed |
|---|---|---|
| 67 Industry Average | 10.9 | 8.8 |
| Metal Mining | 13.5 | 1.1 |
| Bituminous Coal and Lignite Mining | 9.2 | 3.1 |
| Crude Petroleum and Natural Gas | 1.8 | 4.0 |
| Mining and Quarrying of Nonmetallic Minerals, except Fuels | 7.0 | .7 |
| Building Construction-General Contractors | 16.4 | 4.8 |
| Construction Other Than Building Construction-General Contractors | 18.9 | 1.4 |
| Construction-Special Trade Contractors | 10.5 | 3.2 |
| Ordnance and Accessories | 8.0 | 6.4 |
| Food and Kindred Products | 14.1 | 11.3 |
| Tobacco Manufactures | 8.4 | 16.5 |
| Apparel and Other Finished Products Made From Fabrics | 13.1 | 17.1 |
| Lumber and Wood Products, except Furniture | 26.7 | 12.5 |
| Furniture and Fixtures | 19.4 | 15.7 |
| Paper and Allied Products | 10.4 | 7.3 |
| Printing, Publishing and Allied Industries | 5.8 | 7.4 |
| Chemicals and Allied Products | 7.1 | 4.7 |
| Petroleum Refining and Related Industries | 5.6 | 2.7 |
| Rubber and Miscellaneous Plastics Products | 12.0 | 11.3 |
| Leather and Leather Products | 9.5 | 8.8 |
| Stone, Clay, Glass and Concrete Products | 14.3 | 8.0 |
| Primary Metal Industries | 18.8 | 4.0 |
| Fabricated Metal Products, Except Ordnance, Machinery, and Transportation Equipment | 10.5 | 7.7 |
| Machinery, Except Electrical | 6.1 | 4.7 |
| Electrical Machinery, Equipment and Supplies | 6.1 | 9.5 |
| Transportation Equipment | 12.5 | 6.0 |
| Professional, Scientific and Controlling Instruments; Photographic and Optical Goods | 3.4 | 9.2 |
| Miscellaneous Manufacturing Industries | 11.2 | 19.4 |
| Railroad Transportation | 10.8 | 6.7 |
| Local and Suburban Transit and Interurban Passenger Transportation | 19.2 | 9.4 |
| Motor Freight Transportation and Warehousing | 7.9 | 2.8 |
| Water Transportation | 20.9 | 1.6 |
| Transportation by Air | 5.1 | 2.2 |
| Pipe Line Transportation | .6 | .8 |
| Transportation Services | 10.0 | 5.9 |
| Communication | 2.8 | 9.8 |

| Industry | Black Men As a Percent of all Men Employed | Black Women As a Percent of all Women Employed |
|---|---|---|
| Electric, Gas, and Sanitary Services | 5.4 | 4.9 |
| Wholesale Trade | 6.7 | 5.1 |
| Building Materials, Hardware and Farm Equipment Dealers | 17.2 | 7.8 |
| Retail Trade-General Merchandise | 12.3 | 9.7 |
| Food Stores | 8.0 | 5.1 |
| Automotive Dealers and Gasoline Service Stations | 16.2 | 1.5 |
| Apparel and Accessory Stores | 13.6 | 10.9 |
| Furniture, Home Furnishings, and Equipment Stores | 13.0 | 7.6 |
| Eating and Drinking Places | 30.5 | 25.3 |
| Miscellaneous Retail Stores | 14.7 | 14.4 |
| Banking | 5.2 | 6.0 |
| Credit Agencies Other Than Banks | 3.2 | 3.4 |
| Security and Commodity Brokers, Dealers, etc. | 2.4 | 3.6 |
| Insurance Carriers | 2.9 | 5.0 |
| Insurance Agents, Brokers, and Service | 1.5 | 2.3 |
| Real Estate | 14.0 | 9.4 |
| Combinations of Real Estate, Insurance, Loans, Law Offices | 3.0 | 1.7 |
| Holding and Other Investment Companies | 1.9 | 1.8 |
| Hotels, Rooming Houses, Camps, and Other Lodging Places | 25.1 | 36.1 |
| Personal Services | 23.8 | 55.3 |
| Miscellaneous Business Services | 12.8 | 12.4 |
| Automobile Repair, Automobile Services, and Garages | 29.2 | 27.0 |
| Miscellaneous Repair Services | 9.6 | 2.7 |
| Motion Pictures | 3.8 | 3.6 |
| Amusement and Recreation Services, except Motion Pictures | 9.2 | 9.6 |
| Medical and Other Health Services | 24.4 | 21.9 |
| Legal Services | 2.4 | 1.7 |
| Educational Services | 9.9 | 15.3 |
| Museums, Art Gallaries, Botanical and Zoological Gardens | 4.4 | 8.0 |
| Non-profit Membership Organizations | 16.1 | 16.0 |
| Miscellaneous Services | 3.4 | .1 |

*Source:* Equal Employment Opportunity (EEO-1) Survey, 1966, Washington, D.C.: U.S. Equal Employment Opportunity Commission

## Table 4: Black Share of Total Private Employment and of Population

| Standard Metropolitan Statistical Area | Black Population, As Percent of Total Population[a] | Black Male Employment As Percent of Total Male Employment (Private Sector)[b] | Black Female Employment As Percent of Total Female Employment (Non-Domestic, Private)[c] |
|---|---|---|---|
| 46 SMSA Average | 28.3 | 23.8 | 15.8 |
| Birmingham, Ala. | 17.7 | 14.6 | 13.8 |
| Little Rock, Ark. | 4.9 | 2.9 | 3.6 |
| Bakersfield, Calif. | 8.7 | 6.7 | 7.3 |
| Los Angeles, Calif. | 3.0 | 1.9 | 3.4 |
| Sacramento, Calif. | 8.8 | 8.2 | 7.8 |
| San Francisco, Calif. | 6.9 | 6.5 | 7.2 |
| Bridgeport, Conn. | 5.0 | 4.7 | 5.0 |
| Hartford, Conn. | 6.6 | 7.0 | 7.3 |
| New Haven, Conn. | 10.7 | 8.8 | 8.5 |
| Wilmington, Del. | 23.2 | 21.2 | 23.2 |
| Washington, D.C. | 6.0 | 16.5 | 12.7 |
| Atlanta, Ga. | – | .2 | .3 |
| Honolulu, Hawaii | 15.2 | 14.3 | 5.9 |
| Chicago, Ill. | 3.9 | 3.7 | 5.9 |
| Peoria, Ill. | 6.3 | 3.0 | 4.2 |
| Evansville, Ind. | 15.1 | 16.6 | 11.4 |
| Gary, Ind. | 11.1 | 8.8 | 9.5 |
| Indianapolis, Ind. | 30.7 | 21.1 | 17.2 |
| New Orleans, La. | 21.8 | 17.8 | 16.3 |
| Baltimore, Md. | 3.3 | 2.9 | 4.2 |
| Boston, Mass. | 16.2 | 15.5 | 12.5 |
| Detroit, Mich. | 37.1 | 24.7 | 10.4 |
| Jackson, Miss. | 15.6 | 10.5 | 10.7 |
| St. Louis, Mo. | 5.4 | 5.5 | 6.5 |
| Omaha, Neb. | 16.5 | 9.5 | 12.7 |
| Newark, N.J. | 14.7 | 9.5 | 10.2 |
| Trenton, N.J. | 6.8 | 7.0 | 6.2 |
| Buffalo, N.Y. | 14.4 | 8.1 | 13.1 |
| New York City, New York | 2.5 | 3.0 | .1 |
| Syracuse | 6.0 | 5.1 | 5.2 |
| Canton, Ohio | 10.6 | 7.0 | 8.4 |
| Cinncinnati, Ohio | 13.5 | 10.5 | 13.1 |
| Cleveland, Ohio | 7.7 | 4.3 | 5.9 |
| Oklahoma City, Okla. | 1.4 | 1.8 | 1.0 |
| Johnston, Pa. | 16.5 | 11.1 | 4.1 |
| Philadelphia, Pa. | .4 | .3 | .2 |
| Scranton, Pa. | 33.1 | 32.1 | 21.6 |
| Charleston, S.C. | 15.4 | 14.4 | 8.3 |
| Greenville, S.C. | 35.8 | 29.1 | 17.2 |
| Memphis, Tenn. | 14.1 | 10.0 | 10.7 |
| Dallas, Tex. | 2.0 | 1.6 | 1.6 |
| El Paso, Tex. | 11.9 | 9.0 | 7.0 |
| Fort Worth, Tex. | 18.6 | 12.4 | 5.1 |
| Houston, Tex. | 7.0 | 2.9 | 4.8 |
| Charleston, W. Va. | 5.2 | 5.7 | 5.2 |
| Milwaukee, Wisc. | | | |

[a] As estimated for the U.S. Equal Employment Opportunity Commission by Sales Management, Incorporated for 1965.

[b] As reported in the Equal Employment Opportunity Survey (EEO-1) for 1966.

[c] *Ibid.*

## DOWNWARD DISPLACEMENT OF BLACKS: ONE FORM OF DISCRIMINATION

The most uniformly significant indicator of the relative occupational standing of black men and women among these industries and cities is the proportion of the majority work force holding white collar positions. The lower the proportion of majority employees in white collar jobs, the higher the relative occupational standing of black employees tends to be. This relationship applies to both black men and black women, and is an exception in this regard. In general, different independent variables are significant determinants of the relative occupational standing of black men as opposed to black women. This is not surprising, since cities and industries where black men have high relative occupational standing have only a slight tendency to be those where black women also rank high. The correlations by industry and by city between the black male's and the black female's relative occupational standing are only .46 and .45. Although statistically significant, these are not very high and account for only 20% of the variance common to the two distributions.

This exceptionally significant indicator indicates two processes at work in urban labor markets. One of these is the tendency for blacks to be displaced one rung down the occupational ladder from where they would be in the absence of discriminatory mechanisms in the labor market. The degree to which downward displacement occurs depends on the room available, the intensity of the employer's taste for discrimination, and other factors. There is less room to displace blacks downward where most of the majority work force already hold blue collar jobs. Moreover, skill requirements are not high in industries and cities where few people have white collar jobs. Thus, two processes work to give blacks greater chances of occupational equality where blue collar labor is in demand: skill requirements are lower, making the disproportionate exclusion of blacks less likely; and less room exists for discriminatory mechanisms to work so as to displace blacks into occupations where they are underemployed and overqualified.

## PERSONAL CHARACTERISTICS OF BLACK WORKERS

Personal characteristics of blacks, particularly their age and educational background, are significant determinants of their relative occupational standing in private employment. Certain characteristics of industries and labor markets, discussed below, are more significant. Writers too numerous to list have argued that occupational parity will occur only after

educational parity exists for blacks. Applying equal standards for hire, promotion, and pay to all workers will continue to disproportionately exclude blacks from high-paying occupations until the same proportion of blacks as whites can meet these standards. The weakness of this argument is that educational parity by no means assures that occupational or income parity will follow.

Blacks in a given labor market evidence educational parity when their educational background is qualitatively and quantitatively equivalent to that of the majority of persons in the same labor market. Educational requirements, per se, would impose no greater barrier to blacks than to others in meeting qualification standards for jobs. Arguments assuming that the problem of equal employment will be solved simultaneously with the problem of equal education are belied by number of studies[11] in addition to the present one. Among the forty-six cities studied here, a relatively small improvement in the relative occupational standing of black men and women accompanies improvement in the education level of blacks as compared to majority persons.

A rough but sensible measure of the degree to which blacks in these cities exhibit educational parity comes from looking at the proportion of all blacks of working age with high school diplomas along with the comparable proportion of all majority persons.[12] One can also look at these values using higher, rather than secondary, education. Among the forty-six cities the ratio of black to white proportions with high school diplomas averaged .64 for men and .60 for women.[13] Lowest values of this ratio for both sexes were in Jackson, Miss. (.23 and .22 respectively); highest values were in Honolulu (1.49 and 1.21 respectively) where there are very few blacks.

Gains toward educational parity by black men will help them make gains toward occupational parity, but the occupational gain is not commensurate with the educational gain. Moreover, certain institutional changes promise gains more nearly commensurate. On the average, a positive difference between two cities of ten points in this ratio for men indicates a positive difference of six-tenths of one point in the relative occupational standing of black men.[14] Yet the same positive difference of ten points in the percentage of workers unionized indicates a positive difference of one and four-tenths point in the relative occupational standing of black men. Another way to express these relationships is to use standardized units of change in the independent and dependent

variables. The change, measured in standard deviations, in the relative occupational standing of black men from its mean, associated with a change of one standard deviation from the mean value of the black-to-white ratio for high school education is *lower* than the change associated with unionization of the labor market. It is also lower than the change associated with the proportion of majority men in white collar jobs, is negatively related to the relative occupational standing of black men.[15]

Similar conclusions apply to black women: gains toward educational parity in college education will help them make strides toward occupational parity, but the trade-off is not one-to-one. Furthermore, institutional changes in these cities, such as reducing residential segregation[16] and the concentration of newcomers migrating to the city,[17] offer greater improvement in the black woman's relative occupational standing, when standardized units of change are considered. An increase of one standard deviation above the mean value of the black-to-white ratio of the proportions of adult women with a year or more of college indicates an average increase of .3 of a standard deviation in the relative occupational standing of black women from its mean. Equivalent standardized decreases in the degree of residential segregation and in the concentration of in-migrants in the city's population yield increases in the black woman's relative occupational standing of .6 and .4 standard deviations above its mean.[18]

A fundamental question about educational and other personal characteristics of workers is their relevance to job performance. Recommending the elimination of unnecessary job requirements as a "basic strategy" of national manpower policy, the Kerner Commission asserted that such requirements "often have the same prejudicial effect" as explicit racial bias.[19] If workers with a particular educational credential perform a given type of work significantly more productively than workers without it, the credential is relevant. Such relevance obviously exists in many professional and technical fields. However, a growing literature suggests that educational requirements, especially of high school diplomas for blue collar and clerical jobs are shibboleths used by employers without knowledge of whether they are related to productivity or not.[20]

In the industries common to forty-six cities, requirements that large proportions of employees have high school diplomas has adverse impact on the black man's quest for occupational parity. Among these sixty-seven

industries an average of 24% of all male employees had completed four years of high school. A negative difference between two industries of one point in the percent of **all** male employees having a high school education is associated, on the average with a positive difference of 1.8 points in the relative occupational standing of *black* men. In non-statistical language, black men have a much greater chance to attain occupational parity in industries where large numbers of the men employed are not required to have diplomas.

In addition to educational background, age is a personal characteristic of black workers which explains their actual occupational standing relative to the majority of workers. Youth is a decided advantage, although it couples freshness with inexperience. The relative occupational standing of blacks is significantly higher in industries where the black work force is youthful than in those with an older black work force.[21]

But youth has less impact on the relative occupational standing of blacks in private industry that certain general charactistics of the industries themselves. In the case of black women, youth matters less than whether the industry is located in a Southern city. In explaining the variance in the relative occupational standing of black men among industries, youth matters less than several industry characteristics. These characteristics are the proportion of industry employees working for companies with federal government contracts; wage levels of men in the industry; concentration of men of the majority group in white collar jobs; unionization; and the rate of employment growth in the industry.

## GENERAL CHARACTERISTICS OF THE INDUSTRIES AND CITIES IN WHICH BLACKS WORK

General characteristics, reflecting economic conditions, housing patterns, and the impact of migration on the population of cities, have great impact on the employment patterns of blacks in private industry.[22] The relative occupational standing of black women in industries within these labor markets is significantly higher, the lower the proportion of industry employment in Southern cities; the more youthful the black women employees of the industry are, and the lower the proportion of the industry's majority women in white collar jobs. After accounting for the influence of these factors, black women in several industries have higher than average relative occupational standing. These industries are "low discriminators" in the sense that black women have a greater degree

of occupational equality here than would be predicted on the basis of the determinants above. These industries include:

tobacco manufacturing
apparel manufacturing
petroleum refining
pipeline transportation
credit agencies
security bookers
personal services

Few common characteristics exist among this group. These "low discriminators" against black women tend to employ either very low or very high proportions of black women in their female work forces. They represent many sectors of the economies of these cities. Moreover, educational requirements vary greatly among them.

An equally diverse group of industries are "high discriminators" against black women in these cities, in the sense that after accounting for the influence of significant determinants, the relative occupational standing of black women remains far below average. Industries such as railroads and auto repair services employ few women of any race. Others such as real estate and holding companies, use most of their women employees in clerical and sales jobs. Yet, despite the vastly different nature of industries, within this group they have one common characteristic in these forty-six cities: black women have inordinately low occupational standing as compared to the majority of women employees. These "high discriminators" are:

railroad transportation
real estate
combinations of real estate and insurance
holding companies
auto repair services
recreation services

Looking at the entire private sector of each city, one finds that the relative occupational standing of black women is higher, the lower the unemployment rate; the lower the concentration of recent in-migrants in the city's population; the lower the degree of residential segregation; the lower the concentration of majority women in white collar jobs; and the closer black women are to higher educational parity in the city. One finds little difference among Southern and non-Southern cities for those black women who are not in domestic work. After accounting for domestic

workers, however, Southern cities accord black women much lower degrees of occupational equality than non-Southern cities. A tight labor market, with a low unemployment rate, offers the black woman a better chance for occupational equality than a loose one. Maintaining low unemployment rates, and thus high levels of demand for labor, offers occupational advantage to black women. But housing desegregation offers more in standardized units of change. A reduction in the unemployment rate of one standard deviation from its mean indicates, on the average, an improvement above the mean relative occupational standing of black women of .2 standard deviations. Yet, a fall of one standard deviation from the mean degree of residential segregation indicates a rise above the mean relative occupational standing of black women of .6 standard deviation.

The critical industry characteristics insofar as black men are concerned were mentioned above. Their relative occupational standing is higher in those industries where a low proportion of employees work for companies with federal contracts; wage levels for men are high; most men of the majority group are in blue collar jobs; unionization is high; the rate of employment growth is low; the black male employees are young; and relatively few male employees have high school diplomas. These characteristics are listed *in order* of their importance[23] as predictors of the relative occupational standing of black men.

After accounting statistically for the influence of these factors, several industries are "low discriminators" against black men.[24] These include:

transportation equipment
food stores
personal services
security brokerage
museums, art galleries, private, non-profit institutions

Industries termed "low discriminators" and those termed "high discriminators" listed on page five above are a diverse group of industries, having few common characteristics. Both groups include heavy and light industries, representing many sectors of the economies of the forty-six cities. Industries within both groups vary greatly in terms of the share of total male employment held by blacks, from 1.8% in crude petroleum to 18.9% in other construction, both "high discriminators."

The policy most critical in realizing occupational parity for the black male in private industry is the effective enforcement of contract compliance. The relative occupational standing of black men rises more in

standardized units as the proportion of industry employees in contracting companies falls than as *any* other change occurs. If contractors had better records than non-contractors regarding black occupational standing, a strong positive relation would exist between these two variables. Instead, a negative and very significant relation applies. Great need for the federal contract compliance program and for its continued strengthening is evident.

Employment-static industries offer black men greater chances for occupational parity for many reasons, not the least of which is that non-minority men have higher probabilities of moving to expanding industries. Declining industries employ men primarily in blue collar jobs and have a lower level of demand for white collar labor than industries whose employment level is growing rapidly. This fact, of course, does not mean that black men should leave expanding industries in pursuit of jobs in declining industries. Quite the reverse, it demonstrates the pressing need to open doors for blacks in growth industries.

High wage industries also give black males greater degrees of occupational equality than other industries. That is, employers in high-wage industries are more willing to equalize black with majority occupational distributions. However, they also are less willing to give blacks a large share of male employment. Industry wage levels for men correlate positively with the relative occupational standing of black men, but negatively with the black man's share of male employment.

Analysis taking the private sector of each city as the unit of observation reveals that black men have higher relative occupational standing in cities where males of the majority group are concentrated in blue collar jobs; a large part of the city's labor force is unionized; manufacturing industries employ a large share of total private employment; and a relatively high proportion of the city's black men have high school diplomas. Black men have greater chances for occupational equality in unionized cities and industries primarily because white collar jobs are somewhat more open to them, not because unions themselves do not discriminate. Unionization neither helps nor hurts the black man's quest for a greater share of blue collar employment. The correlation between the percent unionization and the black share of all blue collar jobs held by men is zero among these cities and among the industries common to them. The most highly unionized industries are mining, construction, primary metals, petroleum refining, railroads, communications, motor freight, water transportation, and utilities.

Moreover, unions vary greatly regarding the size of black representation in the membership. For example, among building trades unions, black represent only 2% of all plumbers but 14% of all plasterers. Among unions not in the building trades, blacks are only 1.3% of all lithographers and photoengravers, but 12.9% of all hotel and restaurant employee union members.[25]

More effective utilization of black manpower is possible in all the industries and cities of this study. Continued efforts to provide equal educational opportunity must be accompanied by vigorous fair housing and contract compliance efforts. The realization of occupational parity for blacks must accompany the realization of income parity. During the decade of the fifties, occupational advance for black men in the economy meant merely a "move into the lowest end of each 'high-income' occupation, while whites continued to monopolize the jobs at the increasingly distant upper-income end of the occupation."[26] The decade of the seventies must not be a repeat performance.

## FOOTNOTES

[1] Majority refers to a statistical residual derived by subtracting minority employment from total employment. Minority employment equals the sum of Negro, Spanish-Surnamed, Oriental, and American Indian employment.

Dealing with the occupational representation of blacks in the private sector, this report discusses that representation in terms of the earnings capacity of blacks, as reflected in their occupational distribution. Readers interested in a similar report in which socioeconomic status, rather than the earnings of blacks, is the analytic framework should see Barbara R. Bergmann and Jerolyn R. Lyle, "Differences Amongst Cities and Industries in the Occupational Standing of Negroes in the Private Sector", (forthcoming). This latter report contains the results of weighted regressions, whereas the present report discusses findings based on unweighted regressions.

[2] The index of average occupational standing for any group of workers is computed according to the formula:

$$I_i = \frac{\sum_{o=1}^{n} Y_o N_{oi}}{N_i}$$

where $I_i$ = Index of average occupational standing for $i^{th}$ group of workers

$Y_o$ = Median Earnings of Persons in the Experienced Civilian Labor Force in $o^{th}$ Occupation, o=1,n

$N_{oi}$ = Number of persons of $i^{th}$ group employed in private sector in $o^{th}$ occupation

$N_i$ = Number of persons of $i^{th}$ group employed in private sector

The index is computed separately for men and women. Earnings weights used in this study are:

**Median Earnings in 1959 of Persons in the Experienced Civilian Labor Force by Occupation and sex: 1960**

| Occupation | Weight | |
|---|---|---|
| | Male | Female |
| Officials and Managers | $6,664 | $3,355 |
| Professionals | 6,619 | 3,625 |
| Technical | 6,619 | 3,625 |
| Sales | 4,987 | 1,498 |
| Clerical | 4,785 | 3,017 |
| Crafts | 5,240 | 2,927 |
| Operative | 4,209 | 2,319 |
| Laborer (Non-Farm) | 2,948 | 1,872 |
| Service (Except Private Household Workers) | 3,310 | 1,385 |
| Private Household Workers | -- | 684 |

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Summary, U.S. Census of Population 1960,* PC(1)-1D (Washington, D.C.: Government Printing Office, 1960), Table 208, p. 1-553.

3 The use of income (earnings) weights based on the 1960 Census of Population poses no problem insofar as the accuracy of these estimates is concerned. The purpose of the weights is to summarize in one statistic a whole pattern of employment. If weights reflecting income levels by occupation for more recent years had been used, the rank order of the cities would remain unchanged.

4 The EEO-1 survey covers only private employers with 100 or more employees or with government contracts of $50,000 or more.

5 The proportion of employed black women in domestic work varies greatly among the forty-six cities. In two of them, over half of all employed Negro women were domestics in 1960. These were Bakersfield (54.6%) and Little Rock (51.4%).

Source: U.S. Department of Commerce, Bureau of the Census, *Detailed Characteristics, State Summaries, U.S. Census of Population 1960,* PC1(D)-1-50, Washington, D.C.: Government Printing Office, Table 122.

6 The adjustment for private household workers required data on numbers of black and majority women employed in this occupation, since the EEO-1 survey does not include these workers. Since the 1966 EEO-1 survey reflects employment in the last quarter of 1965, the estimated employment in private households is for the same period. The estimates of Negro and white women employed as domestics in last quarter, 1965 are based on two unavoidable assumptions: 1) that the 1960 percentages which Negro female private household workers represented of total employment in each of the 46 Standard Metropolitan Statistical Areas apply to 1965 and 1966; 2) that the 1960 percentages which majority (white) female private household workers represented of total employment within each SMSA apply to 1965 and 1966.

I applied these percentages from 1960* to total SMSA employment on non-agricultural payrolls in 1965** to estimate the number of Negro and white women who were domestics in 1965-66.

7 The sixty-seven two-digit (Standard Industrial Classification) industries were selected as representatives if they met two criteria: a) Total employment within the 46 Standard Metropolitan Statistical Areas of one thousand or more: b) More than one establishment reported in the EEO-1 survey in each of the forty-six Standard Metropolitan Statistical Areas.

8 The reader should note that the question of occupational parity for women, as opposed to men, would be dealt with best by comparing majority and black women to majority men. The results of such comparisons are **very low** indexes for women relative to the majority of men. Since this study's purpose is to answer questions about the chances of acquiring occupational parity for black persons, the comparisons are designed to isolate **racial not sex** differences in average occupational standing. It is quite correct, however, to point out that if black women aspire to only the income and occupational positions of white women, they will remain short-changed. The majority of women do not have occupational or income parity. Black women suffer even more inequality because of race.

9 The size of the black share of total employment is the ratio of black employment to total employment in industry. By city, it is the ratio of black private employment to total private employment, as reported in the EEO-1 survey for 1966. The values are computed separately by sex.

10 A report by Orley Ashenfelter, *Minority Employment Patterns, 1966,* found a negative relation between the size of black worker's share of industry employment and their relative occupational standing. My finding is that there is no relation.

Perhaps the explanation of this difference lies in the fact that Ashenfelter included all industry employment in the nation. I include only that industry employment within the forty-six Standard Metropolitan Statistical Areas.

* U.S. Department of Commerce, Bureau of the Census, *Detailed Characteristics, State Summaries, U.S. Census of Population 1960,* PC (2) 1D, 1-50, Washington, D.C.: Government Printing Office, 1960, Table 122

** U.S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings Statistics for States and Areas, 1939-67,* Washington, D.C.: Government Printing Office, 1967.

[11] See, e.g., Alan B. Batchelder, "Decline in the Relative Income of Negro Men", *Quarterly Journal of Economics,* Vol. LXXVIII, No. 4, November, 1964, pp. 525-548.

Ivar Berg, "Unemployment and the Overeducated Workers", *New Generation,* Vol. L., No. 1, Winter, 1968, pp. 10-14.

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[12] These are computed separately by sex from 1960 Census of Population data. For example, in Jackson 6% of all Negro persons age 25 and over had completed four years of high school, whereas 27% of majority men had. Thus, the ratio 6/27 equals .22. Majority means white persons excluding those persons of Spanish Surname.

[13] All variables are defined in mathematical terms in the dissertation on which this report is based. All data sources are documented as well.

See Jerolyn Lyle, *Differences in the Occupational Standing of Negroes Among Industries and Cities,* (Unpublished Ph.D. Thesis), University of Maryland, January, 1970.

[14] The regression equations supporting statements such as this are also in the dissertation.

[15] Standardized units of change estimated by beta coefficients, indicate the order of importance among independent variables in terms of their impact on the dependent variable.

[16] The measure of residential segregation was developed by Karl and Alma Taeuber. It reflects the percent of all non-whites who would have to move to a different block in order for the distribution of non-whites to equal the distribution of whites among residences throughout the central city. Of cities studied here, residential segregation was greatest (94.6%) in Dallas and lowest (63.9%) in Sacramento.

[17] The concentration of newcomers refers to the proportion of the SMSA's population consisting of in-migrants between 1960 and 1965.

[18] The regression equation supporting this statement is in the dissertation cited above.

[19] *National Advisory Commission on Civil Disorders, Report 253,* New York: Bantam Publishing Co., 1968, pp. 416-417.

[20] See, e.g., George Cooper and Richard B. Sobol, "Fair Employment Criteria", *Harvard Law Review,* Vol. LXXXII, No. 8, June, 1969, pp. 1598-1679.

Ivar Berg, *Education and Jobs: The Great Training Robbery,* New York: Praeger, 1970.

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[21] Youth is measured as follows: the percent of all Negroes employed in the industry who were between the ages of 20-29 in 1960. These are based on the 1960 Census of Population.

[22] This section is based on Chapter III of the dissertation. Complete statistical documentation for these conclusions may be found there.

[23] This refers to the standardized units of change.

[24] The references to high and low discriminators require a precise statistical definition for technical readers. After estimating the equation derived by regressing, according to the least-squares method, the dependent variable on the significant independent variables, one uses the equation to predict the value of the dependent variable for each observation. If the equation were completely accurate, the predicted value of the dependent variable would equal its actual value for each observation. But the regression equation expresses relationships which hold, on the average. There are differences, called residuals, between the predicted and actual values for some observations. Observations with high positive residuals are those for which the predictive equation errors on the low side: the actual value was significantly greater than the predicted value. In the case of a regression such as the one referred to above industries were observations. An industry with a high positive residual is a "low discriminator" because its characteristics lead us to expect black men in their employ to have even lower relative occupational standing than they have in fact. Similarly, an industry with a high negative residual is a "high discriminator" because its characteristics suggest that black men would have higher relative occupational standing than they have in fact.

[25] These percentages are based on data from the Commission's EEO-2 Reporting Program for 1967. The program includes referral unions.

[26] Alan B. Batchelder, "Decline in the Relative Income of Negro Men", *Quarterly Journal of Economics,* Vol. LXXVIII, No. 4, November, 1964, pp. 525-548.

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